

Title. Long-Lasting Insecticidal Nets provide only protection against malaria for a single year in Burundi, an African highland setting with marked malaria seasonality.

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Supplementary material 2 – Reflexivity Statement

1. How does this study address local research and policy priorities?

Malaria is one of the leading causes of morbidity and mortality in Burundi. This study aimed to assess the impact of Long-lasting insecticidal Nets (LLIN) mass-distribution campaigns on malaria incidence between 2011 to 2019 using routinely collected data obtained from the National Health Information System. We focused on the health districts with the highest malaria burden where vector control is most needed. As the provision and timely replacement of LLINs is considered a major intervention for the national malaria control programme in Burundi, this study will contribute to reflections on the policy regarding the use and distribution of LLIN in Burundi.

2. How were local researchers involved in study design?

The presented research has been generated by an international partnerships of researchers from high-income countries and low-income countries. The roles of each person are clearly stated in the section 'contributions of each person'. The conceptualisation of the study was primarily done by partners from high-income countries but we ensured that all authors, including those from low-income countries, contributed to the interpretation of the data. This was done by online meetings and several rounds of revision of the results and manuscript.

3. How has funding been used to support the local research team?

The funding and the operational support of this research is fully assured by Médecins Sans Frontières Operational Centre Brussels' (MSF) proper funding (i.e., no institutional nor private donor funding), MSF is active in Burundi since 1994 and established close relationships with the key-players in malaria control in the country.

4. How are research staff who conducted data collection acknowledged?

The analysis is based on routinely collected data within the existing surveillance system in Burundi. Staff that did the data collection at national level are co-authors of the manuscript.

5. Do all members of the research partnership have access to study data?

All members of the partnership have access to the data.

6. How was data used to develop analytical skills within the partnership?

This was not specifically addressed during this study. Yet, MSF and the Institute of Tropical Medicine, Belgium (ITM) has still an ongoing partnership on malaria control and operational research of malaria where the analytical skill development is foreseen during the different phases of the operational research project.

7. How have research partners collaborated in interpreting study data?

The results of the analysis were reviewed and discussed during several meetings and we ensured that all research partners had enough time to review drafts of the manuscript.

8. How were research partners supported to develop writing skills?

This was not specifically addressed during this study.

9. How will research products be shared to address local needs?

Within the current operational research plan of MSF, ITM and the National Malaria Control Programme in Burundi, a communication plan is embedded and a workshop is foreseen to revise and discuss the outcome of this and future research with the relevant stakeholders (implementers, donors, decision-makers). This addresses a specific need expressed by the local partners.

10. How is the leadership, contribution and ownership of this work by LMIC researchers recognised within the authorship?

ITM and all its researchers endorse the European Code of Conduct for Research Integrity and the Singapore Statement on Research Integrity. We incorporated research integrity in our policy declaration and invest in awareness through research ethics and integrity training and seminars. We followed the standards for authorship as published on ITM's website (<https://www.itg.be/E/research-integrity>).

11. How have early career researchers across the partnership been included within the authorship team?

We have included early career researchers (DS) within the authorship team.

12. How has gender balance been addressed within the authorship?

Thirteen authors are male (WVB, JM, BKMJ, DS, PS, EL, RD, J-MM, FV, NA, WW, PM, CL) and two authors female (ADW, VV)

13. How has the project contributed to training of LMIC researchers?

MSF, ITM and the National Malaria Control Programme Burundi are conducting operational research in Burundi and within these activities training of local staff and partners is foreseen. Specific workshops and continuous operational research training are planned all along the study.

14. How has the project contributed to improvements in local infrastructure?

This research project has not directly contributed to improvements in local infrastructure.

15. What safeguarding procedures were used to protect local study participants and researchers?

There was no primary data collection as part of this project, therefore this question is not directly applicable.